Till Bretschneider

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4941544/publications.pdf

Version: 2024-02-01

53	2,510	218592	243529
papers	citations	26 h-index	44 g-index

58	58	58	2571
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dynamic Actin Patterns and Arp2/3 Assembly at the Substrate-Attached Surface of Motile Cells. Current Biology, 2004, 14, 1-10.	1.8	256
2	The Diaphanous-related formin dDia2 is required for the formation and maintenance of filopodia. Nature Cell Biology, 2005, 7, 619-625.	4.6	233
3	The Three-Dimensional Dynamics of Actin Waves, a Model of Cytoskeletal Self-Organization. Biophysical Journal, 2009, 96, 2888-2900.	0.2	182
4	Phase locking and multiple oscillating attractors for the coupled mammalian clock and cell cycle. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 9828-9833.	3.3	182
5	Mobile Actin Clusters and Traveling Waves in Cells Recovering from Actin Depolymerization. Biophysical Journal, 2004, 87, 3493-3503.	0.2	179
6	The bundling activity of vasodilator-stimulated phosphoprotein is required for filopodium formation. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 7694-7699.	3.3	140
7	Subsecond reorganization of the actin network in cell motility and chemotaxis. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 7601-7606.	3.3	104
8	Bleb-driven chemotaxis of Dictyostelium cells. Journal of Cell Biology, 2014, 204, 1027-1044.	2.3	95
9	Simultaneous quantification of cell motility and protein-membrane-association using active contours. Cytoskeleton, 2002, 52, 221-230.	4.4	86
10	How blebs and pseudopods cooperate during chemotaxis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11703-11708.	3.3	75
11	Reversal of Cell Polarity and Actin-Myosin Cytoskeleton Reorganization under Mechanical and Chemical Stimulation. Biophysical Journal, 2008, 94, 1063-1074.	0.2	69
12	Frequency Modulated Translocational Oscillations of Nrf2 Mediate the Antioxidant Response Element Cytoprotective Transcriptional Response. Antioxidants and Redox Signaling, 2015, 23, 613-629.	2.5	63
13	Three-dimensional scroll waves of cAMP could direct cell movement and gene expression in Dictyostelium slugs.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 4387-4391.	3.3	61
14	Transformation from Spots to Waves in a Model of Actin Pattern Formation. Physical Review Letters, 2009, 102, 198103.	2.9	56
15	Formins and VASPs may co-operate in the formation of filopodia. Biochemical Society Transactions, 2005, 33, 1256.	1.6	50
16	Analysis of cell movement by simultaneous quantification of local membrane displacement and fluorescent intensities using Quimp2. Cytoskeleton, 2009, 66, 156-165.	4.4	47
17	Formins and VASPs may co-operate in the formation of filopodia. Biochemical Society Transactions, 2005, 33, 1256-1259.	1.6	43
18	Dynamic organization of the actin system in the motile cells of Dictyostelium. Journal of Muscle Research and Cell Motility, 2002, 23, 639-649.	0.9	42

#	Article	IF	Citations
19	Progress and perspectives in signal transduction, actin dynamics, and movement at the cell and tissue level: lessons fromDictyostelium. Interface Focus, 2016, 6, 20160047.	1.5	41
20	The leading edge is a lipid diffusion barrier. Journal of Cell Science, 2005, 118, 4375-4380.	1.2	40
21	A Model forDictyosteliumSlug Movement. Journal of Theoretical Biology, 1999, 199, 125-136.	0.8	35
22	Differential localization of the Dictyostelium kinase DPAKa during cytokinesis and cell migration. Journal of Muscle Research and Cell Motility, 2002, 23, 751-763.	0.9	34
23	A Model for Cell Movement DuringDictyosteliumMound Formation. Journal of Theoretical Biology, 1997, 189, 41-51.	0.8	33
24	Time-resolved responses to chemoattractant, characteristic of the front and tail ofDictyosteliumcells. FEBS Letters, 2006, 580, 6707-6713.	1.3	30
25	High Resolution Tracking of Cell Membrane Dynamics in Moving Cells: an Electrifying Approach. Mathematical Modelling of Natural Phenomena, 2010, 5, 34-55.	0.9	30
26	Extracting Fluorescent Reporter Time Courses of Cell Lineages from High-Throughput Microscopy at Low Temporal Resolution. PLoS ONE, 2011, 6, e27886.	1.1	29
27	QuimP: analyzing transmembrane signalling in highly deformable cells. Bioinformatics, 2018, 34, 2695-2697.	1.8	29
28	Polarity, Protrusionâ€“Retraction Dynamics and Their Interplay during Keratinocyte Cell Migration. Experimental Cell Research, 2001, 270, 129-137.	1.2	26
29	Generative Adversarial Networks for Augmenting Training Data of Microscopic Cell Images. Frontiers in Computer Science, 2019, 1, .	1.7	26
30	Image based modeling of bleb site selection. Scientific Reports, 2017, 7, 6692.	1.6	25
31	Strategies for structuring interdisciplinary education in Systems Biology: an European perspective. Npj Systems Biology and Applications, 2016, 2, 16011.	1.4	21
32	3D time series analysis of cell shape using Laplacian approaches. BMC Bioinformatics, 2013, 14, 296.	1.2	19
33	Interactive segmentation of clustered cells via geodesic commute distance and constrained density weighted NystrÃ¶m method. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2010, 77A, 1137-1147.	1.1	16
34	Image based validation of dynamical models for cell reorientation. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2015, 87, 471-480.	1.1	16
35	Frequency modulated translocational oscillations of Nrf2, a transcription factor functioning like a wireless sensor. Biochemical Society Transactions, 2015, 43, 669-673.	1.6	15
36	A novel human receptor involved in bitter tastant detection identified using the model organism Dictyostelium discoideum. Journal of Cell Science, 2013, 126, 5465-76.	1.2	13

#	Article	IF	Citations
37	Localizing the lipid products of PI3KÎ³ in neutrophils. Advances in Biological Regulation, 2016, 60, 36-45.	1.4	11
38	Parameter Estimation in an SPDE Model for Cell Repolarization. SIAM-ASA Journal on Uncertainty Quantification, 2022, 10, 179-199.	1.1	11
39	The distribution of Dishevelled in convergently extending mesoderm. Developmental Biology, 2013, 382, 496-503.	0.9	10
40	A Curvature-Enhanced Random Walker Segmentation Method for Detailed Capture of 3D Cell Surface Membranes. IEEE Transactions on Medical Imaging, 2021, 40, 514-526.	5.4	8
41	Employing Dictyostelium as an Advantageous 3Rs Model for Pharmacogenetic Research. Methods in Molecular Biology, 2016, 1407, 123-130.	0.4	8
42	Quantitative analysis of human ras localization and function in the fission yeast Schizosaccharomyces pombe. Yeast, 2013, 30, 145-156.	0.8	6
43	Fast random walker for neutrophil cell segmentation in 3D. , 2012, , .		3
44	Local Shape Representation in 3D: from Weighted Spherical Harmonics to Spherical Wavelet. , 2012, , .		3
45	The Amoebal Model for Macropinocytosis. Sub-Cellular Biochemistry, 2022, 98, 41-59.	1.0	3
46	LineageTracker: A statistical scoring method for tracking cell lineages in large cell populations with low temporal resolution. , 2011, , .		2
47	Mathematical modelling in cell migration: tackling biochemistry in changing geometries. Biochemical Society Transactions, 2020, 48, 419-428.	1.6	2
48	Interactive Movement, Aggregation, and Swarm Dynamics. , 2003, , 221-241.		1
49	CellCut: A framework for interactive tracking of protein translocations between cell nucleus and cytoplasm. , 2011, , .		0
50	Cartography of spatio-temporal cellular dynamics. , 2011, , .		0
51	Multi-scale non-local means with shape prior for enhancement of cell membrane images. , 2014, , .		0
52	ConservedCis-Regulatory Modules Control Robustness inMsx1Expression at Single-Cell Resolution. Genome Biology and Evolution, 2015, 7, 2762-2778.	1.1	0
53	Antioxidant response element cytoprotective response in aortic endothelial cells coordinated by transcription factor Nrf2 is regulated through frequency-modulated translocational oscillations. Atherosclerosis, 2015, 241, e2.	0.4	0